EFS-Web Receipt date: 07/08/2005



PATENT APPLICATION

Docket No. 13316/3295 (Formerly 2777/3295)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of PURI, Atul et al.

Application No.: 10/811,983

Filed: March 30, 2004

For H.264/AVC CODER INCORPORATING RATE AND QUALITY CONTROLLER

Group Art Unit: 2631

Examiner: To Be Assigned

Customer No.: 23838

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENTS Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. PTO/SB/08, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. §1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office Action on the merits in the present application, OR (d)

EFS-Web Receipt date: 07/08/2005

10811983 - GAU: 2621

Docket No. 13316/3295 Page 2

before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

An English-language Abstract of non-English language reference 87 is attached hereto.

In references 136 and 156, the cited chapters of Digital Multimedia Standards and Multimedia Systems, Standards, and Networks are considered relevant. In order that the Examiner may note all chapters of these books, copies of the tables of contents are also enclosed. If the Examiner desires copies of any of the other chapters of these books, it is requested that he/she contact the undersigned.

In accordance with U.S. practice, copies of the U.S. references are not included. Copies of the following references are attached:

87-100	118	133	139	145	155
105	120	134	140	147	156.
108	125-127	136	142	148	
115	130	137	143	150	

Respectfully submitted,

KENYON & KENYON

Date: July

Registration No. 39,

Kenyon & Kenyon 1500 K Street, N.W. Washington, D.C. 20005 Telephone: (202) 220-4200 Facsimile: (202) 220-4201

Email: rhails@kenyon.com

EFS-Web Receiot date: 07,08/2005

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

tion Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for for the trees of the substitute for for the substitute for for the substitute for the substit Complete if Known Application Number 10/811,983 INFORMATION DISCLOSURE Filing Data 03/30/2004 STATEMENT BY APPLICANT First Namad Invantor PURI. Atul Art I Init 2631 (Use as many sheats as necessary) Examinar Nama to be assigned Sheet of | 10 Attomay Docket Number 13316/3295

		Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevan
Examiner Initials	Cite No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
	1	US- 2,905,756	09/22/1959	Graham	
	2	US- 4,245,248	01/13/1981	Netravali at al.	
	3	US- 4,394,680	07/19/1983	Watanabe	
	4	US- 4,717,956	01/05/1988	Moorhead et al.	
	5	US- 4,920,414	04/24/1990	Remus et al.	
	6	US- 4,958,226	09/18/1990	Haskell et al.	
	7	US- 4,999,705	03/12/1991	Puri	
	8	US- 5,001,559	03/1991	Gonzalas et al.	
	9	US- 5,086,346	02/04/1992	Fujisawa	
	10	US- 5,116,287	05/26/1992	Hironaka et al.	
	11	US- 5,117,283	05/26/1992	Kroos at al.	
	12	US- 5,134,476	07/28/1992	Aravind et al.	
	13	US- 5,136,659	08/04/1992	Kaneko et al.	
	14	US- 5,170,264	12/08/1992	Saito et al.	
	15	US- 5,189,526	02/23/1993	Sasson	
	16	US- 5,194,941	03/16/1993	Grimaldi at al.	
	17	US- 5,196,933	03/1993	Henot	
	18	US- 5,214,507	05/25/1993	Aravind et al.	
	18	US- 5,214,721	05/25/1993	Fukuhara et al.	
	20	US- 5,227,878	07/13/1993	Puri et al.	
	21	US- 5,247,590	09/21/1993	Fukuhara et al.	
	22	US- 5,253,055	10/12/1993	Civanlar et al.	
	23	US- 5,253,056	10/12/1993	Puri at al.	
	24	US- 5,270,813	12/14/1993	Puri et al.	
	25	US- 5,278,646	06/11/1994	Civanlar	
	26	US- 5,345,317	09/06/1994	Katsuno et al.	
	27	US- 5,408,328	04/18/1995	Boliek at al.	
	28	US- 5,414,469	03/09/1995	Gonzales et al.	
	29	US- 5,436,985	07/25/1995	Li	
	30	US- 5,454,051	09/26/1995	Smith	
	31	US- 5,465,119	11/07/1995	Demos	
	32	US+ 5.467.136	11/14/1995	Odaka at al.	

	Examiner Signature	Date Considered	
- 7		 	

**EXAMINES: Initial if efectors considered, whether or not claids in it is conformance with MFDE 600. Drue like through claims if not in conformance and me considered instance only of this form with the conformation to applicant. **Jupica patients explain allowed colors and conformation and the conformation of the conformati

Interesting in students.

1. The state of the students and the state of the state o

PTO/SB/08b(08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	Under the Paperwork Reduction Act of 1995, no persons are required to respond to a contection of information unless it contains a vaid OMB control num							
Substitute	Substitute for form 1449B/PTO				Complete if Known			
INFORMATION DISCLOSURE				Application Number	10/811,983			
	INFORMATION DISCLOSURE			Filing Date	03/30/2004			
STA	STATEMENT BY APPLICANT		First Named Inventor	PURI, Atul				
				Art Unit	2631			
	(Use as many sheets as necessary)		Examiner Name	to be assigned				
Sheet	2	of	10	Attorney Docket Number	13316/3295			

U.S. PATENT DOCUMENTS								
Examiner Cite No.1 N		Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	33	US- 5,473,376	12/05/1995	Auyeung				
	34	US-5,488,418	01/30/1996	Mishima et al.				
	35	US-5,493,513	02/20/1996	Keith et al.				
	36	US- 5,500,678	03/19/1996	Puri				
	37	US- 5,524,024	06/04/1996	Lin				
	38	US-5,532,747	07/02/1996	Yoon et al.				
	39	US- 5,539,468	07/23/1996	Suzuki et al.				
	40	US- 5,561,477	10/01/1996	Polit				
	41	US- 5,566,002	10/15/1996	Shikakura				
	42	US- 5,592,569	01/07/1997	u				
	43	US- 5,600,375	4/1997	Wickstrom				
	44	US- 5,619,591	04/08/1997	Tsang at al.				
	45	US- 5,659,490	08/19/1997	Imamura				
	46	US- 5,633,684	05/27/1997	Teranishi et al.				
-	47	US- 5,699,117	12/16/1997	Uramoto at al.				
	48	US- 5,737,022	04/07/1998	Yamaguchi et al.				
	49	US- 5,748,789	05/05/1998	Laa at al.				
	50	US- 5,757,969	05/26/1998	Kim				
	51	US- 5,757,971	05/26/1998	Kim				
	52	US- 5,764,374	06/09/1998	Seroussi et al.				
	53	US- 5,764,805	06/09/1998	Martuci et al.				
	54	US- 5,778,097	07/07/1998	Nickarson				
	55	US- 5,781,665	07/19/1998	Cullan at al.				
	56	US- 5,786,855	07/28/1998	Chen at al.				
	57	US- 5,790,695	08/16/1998	Suwa				
	58	US- 5,812,197	09/22/1998	Chan at al.				
	59	US- 5,818,532	10/06/1998	Malladi et al.				
	60	US- 5,832,115	11/16/1998	Rosenberg				

Examiner Signature	Date Considered	

"EXAMNER: Initial if reference considered, whether or not citation is in conformance with MPEP 699. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant." Applicants unique citation designation number (cipican): "See Kinds Codes of USPPO Potentio Domination and the cipican and the citation of the citat

Translation is attached.
This codection of information is required by 37 CFR 1,97 and 1,98. The information is required to obtain or retain a benefit by the public which is to fig and by the codection of information is required by 30 U.S. C12 and 37 CFR 1.4.1 This codection is estimated to take 2 hours to compare, including application, Confedentially is governed by 38 U.S. C12 cell 37 CFR 1.4.1 This codection is estimated to take 2 hours to compare, including application, confedentially application from 1 the USPTO. Then will vary depending upon the individual case, run, or comments on the amount of time you require to complete the islom anader surgestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Peparat and Trademan Office, U.S. Department of Commerce, P.O. Box 1490, Alexandria, VA 22313-1490, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissions for Pleatest, P.O. Box 1459, Alexandria, VA 22313-1490, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissions for Pleatest, P.O. Box 1459, Alexandria, VA 22313-1490.

Sheet 3

PTO/SB/08c(08-03) Approved for use through 07/31/2006. OMB 0851-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

13316/3295

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449C/PTO Complete if Known Application Number 10/811.983 INFORMATION DISCLOSURE Filing Date 03/30/2004 STATEMENT BY APPLICANT First Named Inventor PURI, Atul Art I Init 2631 (Use es many sheets as necessary) Examiner Name to be assigned of 10

Attomey Docket Number

U.S. PATENT DOCUMENTS								
Examiner Cite		Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant			
Initials No	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear			
	61	US- 5,835,149	11/10/1998	Astle				
	62	US- 5,850,294	12/18/1998	Aposolopoulos et al.				
	63	US- 5,852,473	12/22/1998	Horne et al.				
	64	US- 5,852,682	12/22/1998	Kim				
	65	US- 5,859,921	01/12/1999	Suzuki				
	66	US- 5,881,180	03/09/1999	Chang et al.				
	67	US- 5,883,981	03/16/1999	Li et al.				
	68	US- 5,912,991	06/15/1999	Jeon et al.				
	69	US- 5,963,257	10/05/1999	Katata et al.				
	70	US- 5,966,468	10/12/1999	Fujimoto				
	71	US- 5,974,172	10/26/1999	Chen				
	72	US- 5,974,184	10/26/1999	Eifrig at al.				
	73	US- 5,978,509	11/02/1999	Nachtergaela at al.				
	74	US- 5,978,510	11/02/1999	Chung at al.				
	75	US- 5,999,189	12/07/1999	Kajiya at al.				
	76	US- 5,999,219	12/07/1999	Boon				
	77	US- 6,005,980	12/21/1999	Eifrig at al.				
	78	US- 6,026,183	02/15/2000	Talluri at al.				
	79	US- 6,055,623	12/21/1999	Takahashi at ai.				
	80	US- 6,057,884	05/02/2000	Chan at al.				
	81	US- 6,097,842	08/01/2000	Suzuki at al.				
	82	US- 6,141,442	10/31/2000	Chan				
	83	US- 6,148,026	11/14/2000	Puri at al.				
	84	US- 6,208,693	03/27/2001	Chen at al.				
	85	US- 6,233,356	05/15/2001	Haskall at al.				
	86	US- 6,459,732	10/01/2002	Chen et al.				

Examiner Signature	Date Considered	

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 695. Draw line through citation if not in conformance and not considered, include copy of this form with nead commisciation to applicant, "Applicant's unique citation designation number (optional)," 59e Kinds Codes of USPO Detail Documents at https://www.uspic.opg/ or MPEP 9010 1.6. "Enter Office in this issued the document, by the MoveMetro (optional)," 59e Kinds Codes of USPO Standard ST3.," For Japanese patient documents, the indication of the year of the reign of the Emperor must proced this serial number of the patient document. "Nint of document upon the appropriate symbols as indicated on the document under WPO Standard ST. 14 for Spotsible." Applicant is to piece a other match there it English harquing and the patient of the patient of the patient observable and the patient observa Translation is attached.

Translation is altached. The control of the Control

PTO/SRIGHOR 403
Approved for use through 07/31/2006, OMB 0651-0031
U.S. Palent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a codection of information unless it contrains a walf OMB control and

Substitute for form 1449D/PTO				Complete if Known		
INFORMATION DISCLOSURE			Application Number	10/811,983		
			Filing Date	03/30/2004		
STAT	EMENT BY	APPLICANT	First Named Inventor	PURI, Atul		
			Art Unit	2631		
(Use as many sheets as necessary)			Examiner Name	to be assigned		
Sheet	4	of 10	Attorney Docket Number	13316/3295		

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶	
	87	EP 0 283 715 A2	09/28/1988	ANT Nachrichtentechnik GmbH		Abs.	
	88	EP 0 400 756 A2	12/05/1990	N.V. Philips' Gloeilampenfabneken Groenewoudseweg			
	89	EP 0 422 404 A2	04/17/1991	International Business Machines Corporation			
	90	EP 0 514 663 A2	11/25/1992	International Business Machines Corporation			
	91	EP 0 517 256 A2	12/09/1992	Sony Corporation			
	92	EP 0 534 350	03/31/1993	Matsushita Electric Industrial Co., Ltd (JP)			
	93	EP 0 540 961 A2	05/12/1993	International Business Machines Corporation			
	94	EP 0 566 219 A2	10/20/1993	Canon Kabushiki Kaisha			
	95	EP 0 582 819 A2	02/16/1994	Sony Corporation			
	96	WO 94/27252 A	11/24/1994	Competitive Technologies, Inc.			
	97	EP 0 746 159 A2	12/12/1996	Matsushita Electric Industrial Co., Ltd.			
	98	EP 0 753 970 A2	01/15/1997	Sharp Kabushiki Kaisha			
	99	CA 2,168,641	03/28/2000	Kabushiki Kaisha Toshiba, JP			

Examiner Signature	Date Considered	

*EXAMNER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication the applicant. *Applicant's unique citation designation number (optional): 5 See Kinds Codes of USPPO Patent Documents at www.usdocapcer or MPEP 98101.4. *Enter Office in Instead the document, by the two-letter code (VIPPO Stands CST.3).* For Talparese parent document, by the indication of the year of the reign of the Emperor must proceed the sental number of the patent document. *Kind of occument the apportance sumbles as indicated on the document could refer the patent document. *Girls of occument the apportance sumbles as indicated on the document could refer the Stands CST.5 of 5 postable. *Applicant is to place a office-time Americant English large-upge.

Innatiation is attached.

This celection of interments in required by 27 OFR 1,97 and 1.88. The information is required to abbein or stall in a benefit by the public which is to fig (and by the public which is to complete, including pathedring, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time by un require to complete the is form and/or supergenous for reducing the barden, should be sent to the fich till information Officer. U.S. Department of Commerce, P.O. Box 1450, Alexandrin, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioned for Patients, P.O. Box 1450, Alexandrin, VA 22313-1450.

I haden the Description of Destruction And of 1006 and necessary

PTO/SB/08e(08-03)
Approved for use through 07/31/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute	Substitute for form 1449E/PTO			Complete if Known		
INCORMATION DISCLOSURE				Application Number	10/811,983	
	INFORMATION DISCLOSURE			Filing Date	03/30/2004	
STAT	STATEMENT BY APPLICANT		First Named Inventor	PURI, Atul		
				Art Unit	2631	
(Use as many sheets as necessary)		Examiner Name	to be assigned			
Sheet	5	of	10	Attomey Docket Number	13316/3295	

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	100	CHEN, T., MPEG4 Video Verification Model VM 5.0, pages 2-192
	101	FUKINUKI, T.; "Measurement of Movement and Velocity of Moving Objects with Picture Signals"; IE78-67; pages 35-41; Central Research Laboratory; Hitachi, Ltd.; Kokubunji, Tokyo, Japan, 185; and English translation
	102	KOGA, T. et al.; "Motion-Compensated Interframe Coding for Video Conferencing"; IE81-54; pages 85-90, C&C Systems Research Laboratories; Nippon Electric Co., Ltd; and English translation
	103	NONOMIYA, Y.; "Motion Correction for Interframe Coding Systems," IE78-6; pages 1-10; General Technology Research Institute; Nippon Broadcasting Association; and English translation
	104	Web site material, "MPEG-4: A Flexible Coding Standard for the Emerging Mobile Multimedia Applications," http://www.tnt.uni-hannover.de/project/eu/momusys/docs/Paper/IST/pimrc/pimrc.html
	105	COHEN et al., "Adaptative Differential Coding of Picture Signals Based on Local Contour Prediction," Communications and Knowledge, Partners in Progress, November 29, 30 - December 1, 1976, Dallas, Texas
	106	PLOYSONGSANG, A. et al., "DCT/DPCM Processing of NTSC Composite Video Signal," IEEE Transactions On Communications, vol. COM-30, no. 3, pp. 541-549, XP002062314, ISSN: 0090-6778, 1 March 1982 (1982-03-01)
	107	CHAM et al., "DC Coefficient Restoration in Transform Image Coding," IEE Proceedings, Vol. 131, Pt. F, No. 7, pages 709 - 713, December 1984
	108	SEE et at., "Efficient Encoding of DC Coefficients in Transform Coding of Images Using JPEG Scheme," Signal Image and Video Processing, Vol. 1, No. Symp. 24, published 11/06/1991, Institute of Electrical and Electronics Engineers, June 11-14, 1991, pages 404-407, Singapore
	109	KIM, J. W. et al., "A Transform Domain Classified Vector Quantizer for Image Coding," IEEE Transactions on Circuit and Systems for Video Technology, pp. 3-14, XP002115624, March 1992 (1992-03)
	110	PURI, A., "Invited address: Video Coding Using the MPEG-1 Compression Standard," AT&T Bell Labs, Holmdel, NJ, 1992 Silo Intl. Symposium Digest of Technical Papers, Society for Information Display, Playa del Rey, CA, May 1992
	111	DE NATALE, F. G. B. et al.: "Adaptive DCT For Image-Data Compression," European Transactions on Telecommunications and Related Technologies, vol. 3, no. 4, pp. 359-366, XP000310681, ISSN: 1120-3862, 1 July 1992 (1992-07-01)

Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*Applicant's unique citation designation number (pointed). *Applicant is unique citation designation number (pointed). *Applicant's unique citation designation number (pointed).

**The conformation of the citation of the citat

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is gowered by 35 U.S. C. 122 and 37 CFR 1.4. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Then will vary depending upon the individual case. Any comments on the animation of this required process. Any comments on the animation of this required process. Any comments on the animation of this required process. Any comments on the animation of this required process. Any comments on the animation of the Chief of the

PTO/SB/08f(08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

		Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number						
$^{\prime}$	Substitute for form 1449F/PTO					Complete if Known		
1	INFORMATION DISCLOSURE				Application Number	10/811,983		
l	STATEMENT BY APPLICANT				Filing Date	03/30/2004		
				PPLICANT	First Named Inventor	PURI, Atul		
					Art Unit	2631		
	(Use as many sheets as necessary)			necessary)	Examiner Name	to be assigned		
Ē	Sheet	6	of	10	Attorney Docket Number	13316/3295		

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, dity and/or country where publisher.
	112	KOK, C. W. et al.: "Image Coding Using DCT of Wavelet Coefficients," Proceedings of the IEEE-SP International Symposium Time-Frequency and Time-Scale Analysis (CT. No. 92TH0478-3), pp. 475-478, XP002115655 1992, NY, NY, IEEE, USA ISBN: 0-7803-0805, Victoria, BG, Canada, 4-6 Oct. 1992
	113	TEST MODEL EDITING COMMITTEE, TELECOMMUNICATION STANDARDIZATION SECTOR, STUDY GROUP 15, EXPERTS GROUP FOR ATM VIDEO CODING (RAPPORTEUR'S GROUP ON PART OF Q.2/15), INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO-IECUTO:1/SC29WG11 MPEG93/457, "Test Model 5," Draft, Document AVC-451, Version 1, Coded Representation of Picture and Audio Information, April 1993
	114	PURI. A. "Video Coding Using the MPEG Compression Standard." ATAT Bell Labs, Holmdel, NJ, Visual Communications and Image Processing '93, Haskell <i>et al.</i> Chairuf-Editions, Cambridge, MA, pages 1701-1713, Vol. 2094, Part Three, SPIE - The Int1. Society for Optical Engineering, Bellingham, WA, November 8-11, 1993
	115	INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISORIEC JTC:18C22MVG11. N0702 (pevised); Incorporating N0702 (pevised) incorporating N0702 Delta ol 24 March and Further Editorial Corrections; "information" Technology — Generic Coding of Moving Pictures and Associated Audio Information: Video, Recommendation H.262*; ISO/IEC 13318-2; May 10, 1994
	116	SCHMIDT et al., "Performance Evaluation of Nonscalable MPEC-2 Video Coding." AT&T Bell Laboratories, Holmdel, New Jersey, Visual Communications and Image Processing '94, Katasogetos, Ageptech K, Chair/Editor, Chicago, Illinois, Pages 296-310, Vol 2308, Part One, SPIE – The International Society for Optical Engineering, Bellingham, Washington, September 25-29, 1994
	117	INTERNATIONAL ORGANISATION FOR STANDARDISATION: Generic Coding of Moving Picture and Associated Audio Information; Video; ISO/IEC JTC1/SC29/WG11 NXXXX; ISO/IEC 13818-2, November 1994
	118	AIZAWA & HUANG, "Model-Based Image Coding: Advanced Video Coding techniques for Very Low Bit-Rate Applications," Proceedings of the IEEE, February 1995, vol. 83, no. 2, pp. 259-271
	119	AOE SUB GROUP, ORGANISATION INTERNATIONALE DE NORMALISATION: "MPEG-4 Proposal Package Description (PPD). Revision 2 (Lausanne Revision)"; Source: ISOIICE JTC:/SC29/WG11 N0937, MPEG-98/ Coding of Moving Pictures and Associated Audio Information; March 1995
	120	HARTMAN et al., The VRML 2.0 Handbook Building Moving Worlds on the Web, pages 45-46, 264-265, Silicon Graphics, Inc. Addison-Wesley Publishing Co., 1996

Examiner Signature	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw fine through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*Applicant's unique citation designation number (optional). *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is equired by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to the (per by the USPTO to process) an application. Confidentiality is gowered by 58 U.S. C. 122 and 37 CFR 1.14. This collection is estimated to late 120 mnues to complete, including gathering, preparing, and submitting the completed application from to the USPTO. Time will vary depending upon the individual conservation on the amount of time your require to complete the form ander suggestions for moducing this business, should be sent to the Cheff of the Ch

PTO/S8/08/g(08-03)
Approved for use through 07/31/2008, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

_	Citos de rapaw	UK RUU	JULIUTAU (I 1995, NO persons	are required to respond to a conection or	ENGINEAUGI LENESS IL CONTEST S A VANO CIVID CONTO I RUMDET
	Substitute for form 1449G/PT	0			Complete if Known
	NEODMATION	ъ.	OL OCUPE	Application Number	10/811,983
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date .	03/30/2004
:				First Named Inventor	PURI, Atul
				Art Unit	2631
	(Use as many sheets as necessary)			Examiner Name	to be assigned
	Sheet 7	of	10	Attorney Docket Number	13316/3295

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), dale, page(s), volume-issue number(s), publisher, o
	121	PURI, Atul, "Status and Direction of the MPEG-4 Standard," AT&T Bell Labs, Holmdel, NJ, Multimedia Communications and Video Coding, Wang et al., Editors, pages 349-356, Plenum Press, New York, 1996
	122	CHIARIGLIONE, Leonard, Florence Press Release, Source: "MPEG Press Release," Int'i Organisation for Standardisation, Coding of Motion Pictures and Audio, ISO/IEC JTC1/SC29/WG11N 1249, pp. 1-3, Firenze (Florence), Exhibit B, March 1996
	123	PURI et al., "Initial B-Picture Syntax Proposal for MPEG-4 Video," Int'I Organisation for Standardization, Coding of Moving Pictures and Associated Audio, ISO/IEC JTC1/WG11/MPEG 96/0776, Florence, March 1996
	124	PURI et al. "SBASIC Video Coding and Its 3D-DCT Extension for MPEG-3 Multimedia," ATAT Bell Labs, Holmdel, NJ, Visual Communications and Image Processing '98, Assari et al., Chairsefidiens, Orlands, pages 1331-1341, Vol. 2727, Part Three, SPIE - The Intl. Society for Optical Engineering, Bellingham, WA, March 17-20, 1996
	125	RIJKSE, Karel, Contact Person, Inft. Telecommunication Union, ITU-T Draft H.263, Telecommunication, Standardization Sector of ITU, Line Transmission of Non-Telephone Signals, "Video Coding for Low Bitrate Communication," Draft ITU-T Recommendation H.263, Ittp://www.image.ct/pude.lu/Psykhotan/h263/363.html, pp. 1-49, May 2, 1996
	126	AD HOC GROUP ON MPEG-4 VIDEO VM EDITING, "MPEG-4 Video Verification Model Version 2.1, Source: Video Group, International Organization for Standardisation; Coding of Moving Pictures and Associated Audio Information ISO
	127	SCHMIDT, R. L., PURI, A. and HASKELL, B. G. (AT&T): INTERNATIONAL ORGANISATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION SOLEC JTC18C29WG11, MPEG981084: Coding of Moving Pictures and Associated Audio, "Results of Scalability Experiments," Tampere, Finland, July 1996
	128	TAN, T.K. and SHEN, S. M., "Intra Prediction (T9/T10) and DC/AC Prediction Results"; INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC. JTC1/ISC29WG11, MPEG 96/0939, Source: Panasonic Singapore Laboratories Pie Ltd (Matsushita), Coding of Moving Defures and Associated Audio Information; July 1996
	129	SULLIVAN, Gary J., Contact, "Altered Sections of H.263 for Draft Text of H.263+"; ITU - Telecommunications Standardization SectorDocument: ITU-LBC-96-358R1, STUDY GROUP 15, LBC Experts Group. Sheoperfon. UK. July 15-18, 1996

Examiner Signature	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 600. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant, *Applicant's unique citation designation number (optional). *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.88 in information is required to obtain or retain a benefit by the public which is foll fet and by

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is gowered by 35 U.S. C.1.22 and 37 CFR 1.14. This collection is estimated to late 120 minutes to complete. Including gathering, preparing, and submitting the completed application from to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete it as from another superiors for medicing lists between the individual control in the Chief of t

PTO/SB/08h(08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

_	ones de l'aperiori resocuti recon 1000, no persons de l'aquies di l'espois de disecution sindifficial di liessa i con estre d'internation de l'espois					
Substitute	for form 1449H/PTO			Complete if Known		
INIEO	DMATION DIC	CL OCUPE	Application Number	10/811,983		
INFORMATION DISCLOSURE			Filing Date	03/30/2004		
STA	EMENT BY A	PPLICANT	First Named Inventor	PURI, Atul		
			Art Unit	2631		
(Use as many sheets as necessary)			Examiner Name	to be assigned		
Sheet	8 of	10	Attomey Docket Number	13316/3295		

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), tille of the article (when appropriate), tille of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where publisher.)
	130	"The Virtual Reality Modeling Language Specification," Version 2.0, ISO-IEC CD 14772, August 4, 1996
	131	AD HOC GROUP ON MPEG-4 VIDEO VM EDITING, "MPEG-4 VIDEO VERIFICATION MODEL VERSION 3.2," INTERNATIONAL ORGANISATION FOR STANDARDISATION, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Associated Audio Information, Chicago, September 1996
	132	PURI, A., SCHMIDT, R. L. and HASKELL, B. G. (AT&T): INTERNATIONAL ORGANISATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC/18C29/WC11 MPEG96/1320; Coding of Moving Pictures and Associated Audio; "Description and Results of Coding Efficiency Experiment T9 (part 4) in MPEG-4 Video; "Spet, 1996, Chicago
	133	CHEN et al., IEEE International Conference on Image Processing, "An Approach to Region Coding for Content-Based Scalable Video," September 16, 1996, vol. 3, pp. 399-402
	134	EBRAHIMI, T., GSTERMANN, J., O'CONNELL, K., JANG, E.S. and the Ad hoc Group on Video Working Draft Editing, INTERNATIONAL ORGANIZATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/MG11 N1470, MPEG96/ Maceio, "Working Draft 1.0 of ISO/IEC 14496-2", Puri (Editor), Coding of Moving Petures and Audio, Nov. 1996
	135	AD HOC GROUP ON MPEG-4 VIDEO VM EDITING; INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISONEC JTC/1/SC29/ WG11, MPEG 96/ XXXX, Coding of Moving Pictures and Associated Audio Information, "MPEG-4 Video Verification Model Version 5.1", Dec. 1996
	136	HASKELL, Barry G., PURI, Atul and NETRAVALI, Arun N., "Digital Video: An Introduction To MPEG-2," Digital Multimedia Standards; Chapters 7-9, pp. 146-229, 1997
	137	HASKELL, Barry G., PURI, Atul and NETRAVALI, Arun N., "Digital Video: An Introduction To MPEG-2," Digital Multimedia Standards; Chapter 17, "MPEG-4 and the Future," 1997
	138	Web site material, "MPEG-4 Video and Its Potential for Future Multimedia Services," http://wwwam.hhi.de/mpeg-video/papers/ sikora/iscas.htm (1/27/97)
	139	CHEN et al., IEEE Transactions on Circuits and Systems for Video Technology, "Coding of Subregions for Content-Based Scalable Video," vol. 7, No. 1, pp. 256-260, February 1997

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

Applicants using calculation designation number optionally. Applicants is using calculation designation number optionally. Applicants is using calculation designation number optionally. Applicants is using calculation designation number optionally. Applicant is to ligida a check mark here if English Inguage Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to life (and by the USPTO to process) an application. Confidentially is governed by 35 U.S. C. 122 and 37 CFR 1.41. This collection is estimated to but a 120 minutes. to Complete, inclining gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this bursten, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Son 1450, Alexandria, V.A. 2313 -150 DO NOT SEND. FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PTO/SB/08i(08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449I/PTO		Complete if Known
INFORMATION BIGGI COURT	Application Number	10/811,983
INFORMATION DISCLOSURE	Filing Date	03/30/2004
STATEMENT BY APPLICANT	First Named Inventor	PURI, Atul
	Art Unit	2631
(Use as many sheets as necessary)	Examiner Name	to be assigned
Sheet 9 of 10	Attorney Docket Number	13316/3295

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, oly and/or country where published.
	140	TEKALP & VAN BEEK, "CORE EXPERIMENT M2: Triangular Mesh-Based Coding with Object- Based Functionalities," International Organization for Standardisation - University of Rochester, ISO/IEC_JTC1/SC29/WG11 MPEG96/1627, pages 1-18, February 1997
	141	PURI et al., "Improvements in DCT Based Video Coding," AT&T Laboratories, Visual Communications and Image Processing '97, San Jose, California, SPIE - The International Society for Optical Engineering, Bellingham, Washington, February, 1997
	142	EBRAHIMI, T., HORNE, C., OSTERMANN, J., JANG, E.S., and the Ad hoc Groups on Video & SNHC VMWD Editing; Source: Video & SNHC Groups; INTERNATIONAL ORGANIZATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION, INSOIREC JTC:19C:29 WG1 i N1797, MPEG977, Working Draft 4.0 of ISO/IEC 14498-2; A. Puri (Editor): Slockhoin, July 1997.
	143	ELEFTHER(ADIS et al., editors, "Text for CD 14496-1 Systems," Int'l. Organization for Standardisation, Coding of Moving Pictures and Audio, ISO/IEC JTC1/SC29/WG11, N1901, pp. +207, November 21, 1997
	144	PURI et al., "Current and Future Trends in Multimedia Standards," Multimedia Technology for Applications, Sheu et al., Editors, Chapter 1, pages 3-35, IEEE Press Marketing, Piscataway, NJ, 1998
	145	PURI, A. and ELEFTHERIADIS, A., "MPEG-4: An Object-Based Multimedia Coding Standard Supporting Mobile Applications" invited paper in Mobile Networks and Applications, 3, pp. 5-32, 1998
	146	Web site material, "The Structure of the MPEG-4 Video Coding Algorithm," http://www.ee.iisc.ernet.in/people/students/gupta/ Mpeg4/Coding/fmpeg4vm.htm (3/1/98)
	147	INT'L. ORGANIZATION FOR STANDARDISATION, CODING OF MOVING PICTURES AND AUDIO, ISO/IEC JTC1/SC29 WG11, N2403, "MPEG-4 Standard Completed," 6 pages, October12-16, 1998
	148	FDIS/BIFS, Technical Paper, Chapter 9, Sections 9.1 through 9.4.2.100.2, 16:37, November 23, 1998
	149	MPEG-4 Systems, "Coding of Audio-Visual Objects: Systems," ISO/IEC JTC 1/SC 29/WG 11, N2501, ISO/IEC 14496-1:1999(E), December 18, 1998

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

Solutions and the second process of the seco to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08i(08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449J/PTO				Complete if Known	
INITO	DALATION	DIO	OL OCUPE	Application Number	10/811,983
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	03/30/2004
			PPLICANT	First Named Inventor	PURI, Atul
				Art Unit	2631
(Use as many sheets as necessary)			necessary)	Examiner Name	to be assigned
Sheet	10	of	10	Attorney Docket Number	13316/3295

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or countly where publisher.
	150	PURI et al., "Scene Description, Composition, and Playback Systems for MPEG-4," SPIE, Visual Communications and Image Processing '99, San Jose, California, pp. 2-13, January 25-27, 1999
	151	PURI, A. and TEKALP, A. M., "MPEG-4 and MPEG-7 Standards," Electronic Imaging, Course Notes, San Jose, January 1999
	152	MPEG-4 SYSTEMS GROUP, N2739, "Text for ISO/IEC 14496-1/PDAM1," ISO/IEC JTC1/SC29/WG11, March 1999
	153	MPEG-4 SYSTEMS GROUP, N2741, "MPEG-4 Systems Version 2 Verification Model 6.0," ISO IEC JTC1/SC29/WG11, March 1999
	154	Web site material, "Object-Based Coding," http://www.ece.concordia.ca/isorial/seminar1/node18.html (7/14/99)
	155	LIFSHITZ, Z., DICAGNO, G., FRANCESCHINI, G. and BATTISTA, S., "MPEG-4 Players Implementation," Multimedia Systems, Standards, and Networks, Puri, A. and Chen, T., Editors, Chapter 16, pp. 461-486, Marcel Dekker, Inc., New York, New York, 2000
	156	PURI, A. and CHEN, T., editors, <i>Multimedia Systems</i> , <i>Standards</i> , <i>and Networks</i> , Chapters 3-5, 7-9, 12 and 13; Marcel Dekker, Inc., New York, New York, 2000
	157	INT'L. ORGANISATION FOR STANDARDISATION; CODING OF MOTION PICTURES AND AUDIO, ISO/IECT 1874-22 1999/Amd. 1200(E); ISO/IECT 107.15/229/WO11; SC 29 Secretaria: JUSC; 'Information Technology- Coding of Audio-Visual Objects - Part 2: Visual, Amendment 1: Visual Extensions; Exhibit D, January 31, 2006.

_			
Examiner Signature	/Anner Holder/	Date Considered	03/24/2008

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

**E-DAMINET: Initial in Reference considered, withhelf or not crastion is a continuation with NPEP 000. Uses when through castion in our incommence

**Applicant's unique calciant designation number (politically, "Applicant's unique "English Inaquage" Franklistion is attached.

**Applicant's unique calciant designation number (politically, "Applicant's long loca or shock mark here! English Inaquage Franklistion is lattached.

This collection of information is required by 37 CFR 1.98. The information is required to Obtain or retain a benefit by the public which is to life (and by the USPTO) to process a mapplication. Confidentiality is governed by 35 U.S. C. 122 and 37 CFR 1.4. This collection is estimated to late 120 minutes. to complete. Including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this braden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Officer, U.S. Department of Commerce, P.O. Box 1450, Marcha, V.A 22313-100. DN OTS END FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.